

US 29 North Corridor Advisory Committee Meeting #5

Montgomery County **RAPID TRANSIT**

US 29

East County Regional Services Center
Silver Spring, Maryland
December 1, 2015
6:30 pm to 9:00 pm



Welcome

Agenda:

- BRT Project Management Team Update 10 min
- Project Process & Schedule 20 min
- Goals & Objectives/Preliminary Purpose & Need 20 min
- Conceptual Alternatives Development 15 min
 - Breakout Discussions 45 min
 - Discussion and Sharing 30 min
- Additional Q&A 10 min

BRT Project Management Team Update

- MCDOT, SHA, MTA partnership continues uninterrupted
- Management of US 29 and MD 355 Corridor Studies transferred from SHA to MTA
 - SHA has seen increase in highway related projects, straining resources
 - MTA has available resources
 - MTA brings additional transit-related expertise
- All consultant teams will remain involved

Questions?

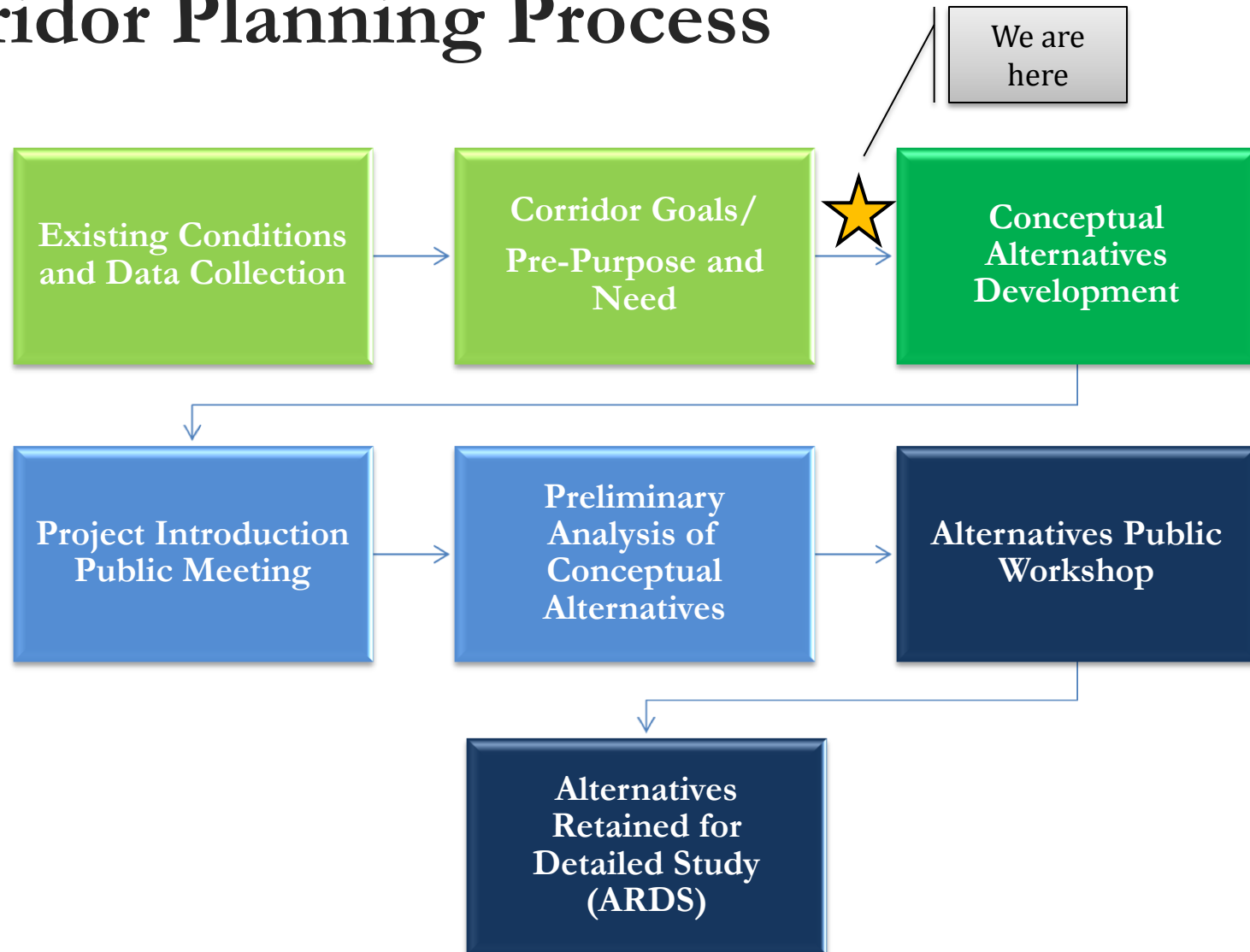
✓ BRT Project Management Team Update

✓ Q&A

- Project Process & Schedule
- Goals & Objectives/Preliminary Purpose & Need
- Conceptual Alternatives Development
 - Breakout Activity
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Corridor Planning Process



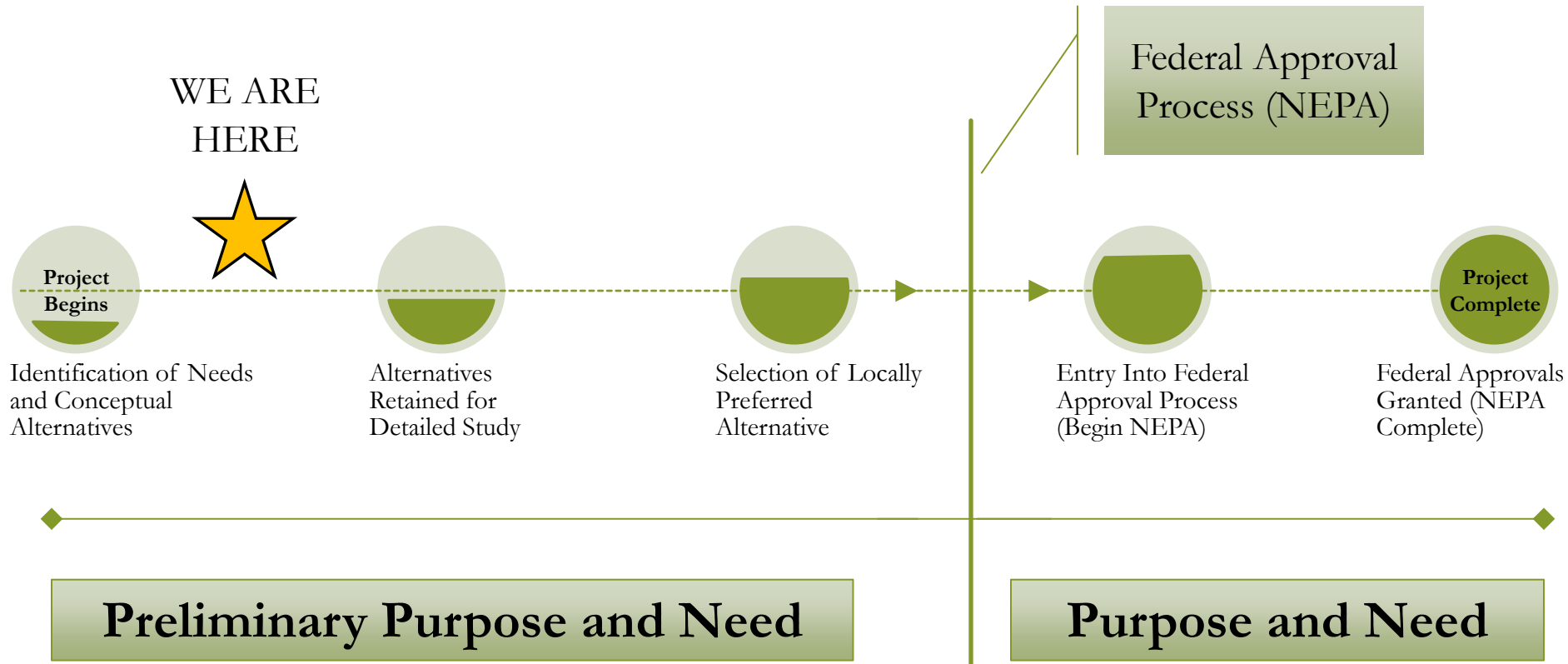
US 29 Milestone Schedule

	Summer 2015	Fall 2015	Winter 2016	Spring 2016	Summer 2016	Fall 2016	Winter 2017	Spring 2017	Summer 2017	Fall 2017	Winter 2018	Spring 2018	Summer 2018	Fall 2018	Winter 2019
Project Purpose and Need Background			★												
Conceptual Alternatives			★							★					
Project Introduction Public Meeting				★											
Ridership, Traffic and Impacts Analysis						★									
Alts. Public Workshop															
ARDS Package															
Alternatives Refinement															
Build Traffic & Ridership															
Environmental Tech Analysis															
Draft Corridor Report															
Public Workshop															
LPA Selection															

★ CAC meetings through ARDS. Future meetings TBD based upon outcome of ARDS

Planning Timeline

WE ARE
HERE



Questions?

- ✓ BRT Project Management Team Update
- ✓ **Project Process & Schedule**
 - ✓ Q&A
- Goals & Objectives/Preliminary Purpose & Need
- Conceptual Alternatives Development
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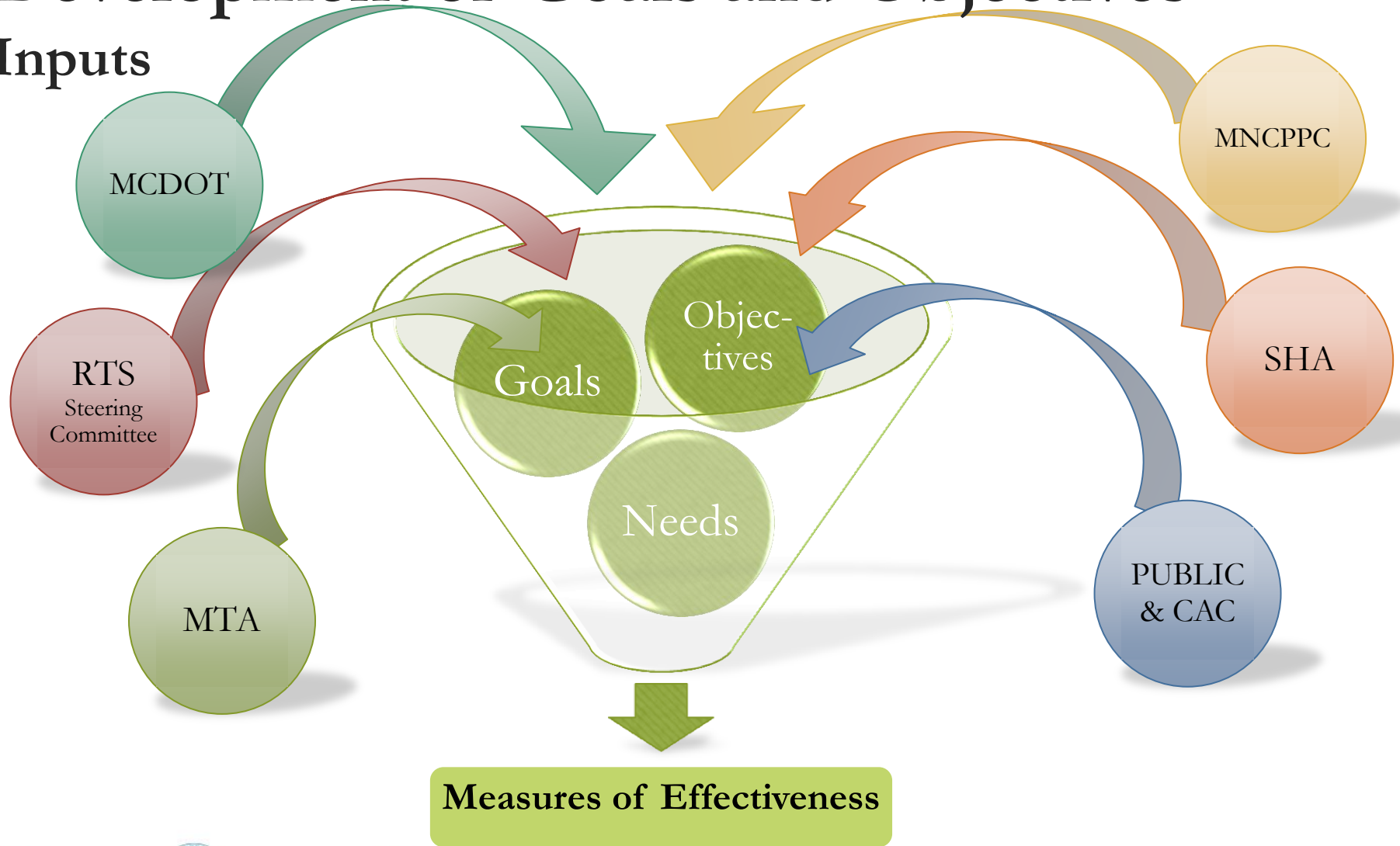
Development of Goals and Objectives

CAC Input

- **CAC Meeting #2**
 - Corridor Planning Study
 - Overview
 - Needs and Values Exercise
- **CAC Meeting #3**
 - Draft Preliminary Purpose and Need language
 - Purpose
 - Need
 - Existing and Projected Traffic & Transit Conditions

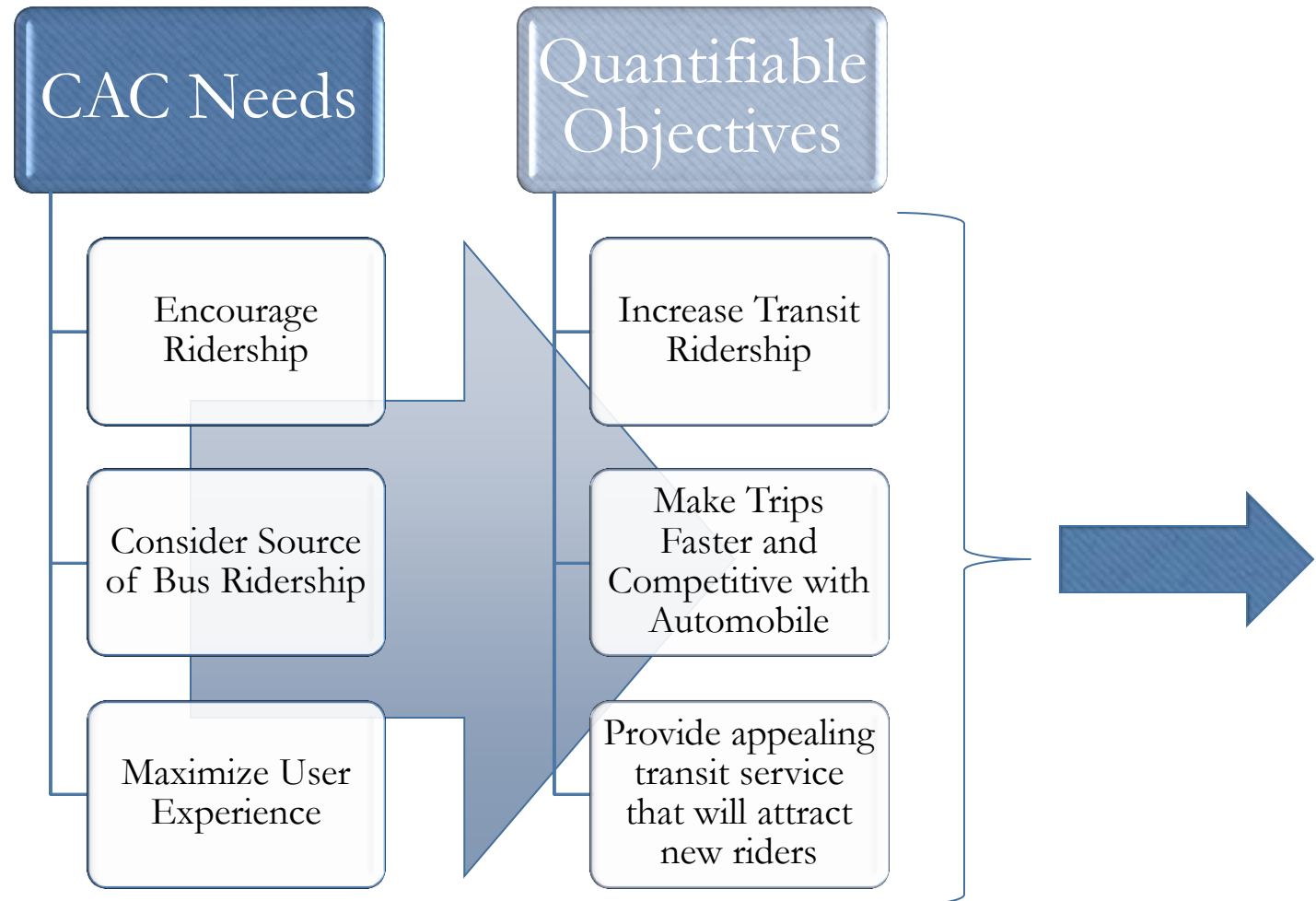
Development of Goals and Objectives

Inputs



Development of Goals and Objectives

CAC Input



Goal

Improve Quality of Transit Service

Objectives

Make Bus Trips Faster

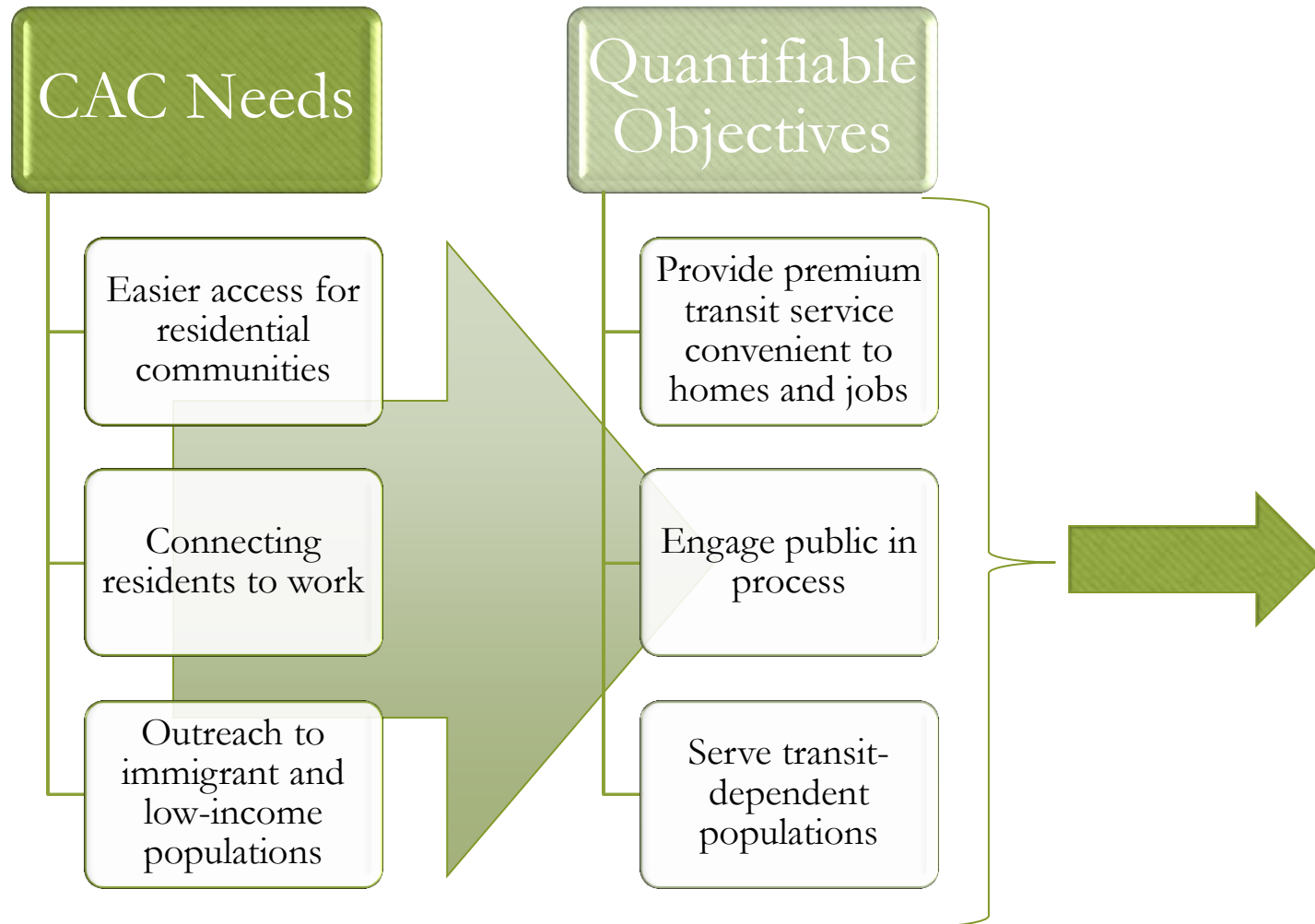
Make Door-to-Door
Transit Travel Time
Competitive with
Door-to-Door Auto
Travel

Increase Transit
Ridership

Provide an Appealing
Transit Service that
will Attract New
Riders

Development of Goals and Objectives

CAC Input



Goal

Develop Transit Services that Enhance Quality of Life

Objectives

Provide Premium Transit Service Convenient to Households and Jobs within the Corridor

Minimize Private Property Impacts

Serve Transit Dependent Populations

Engage Public in Process

Goal

Improve Mobility Opportunities and Choices

Objectives

Serve as Many
Travelers as Possible
by Efficiently Utilizing
the Right-of-Way

Balance Travel Times
for Automobile and
Transit Users

Enhance Pedestrian
and Bicycle Options in
the Corridors

Create Direct
Transfers Between
Premium Bus and
Other Modes

Goal

Develop Transit Services that Support Master
Planned Development

Objectives

Improve Alternative
Transportation Service to and
Between Activity Centers

Increase Trips by Non-
Automobile Modes to Support
Development in the Master
Plan

Select station locations that
support infill and
redevelopment

Goal

Support Sustainable and Cost Effective Transportation Solutions

Objectives

Maintain Environmental Quality

Minimize Cost of Building and Operating Transportation Services

Purpose and Need (Revisited)

Purpose and Need = WHAT and WHY

Purpose

- **WHAT** are the major goals and objectives?
- **WHY** will they be addressed by this project?

Need

- **WHAT** are the existing or forecasted problems?
- **WHY** are these problems occurring?

These fundamental questions provide support for later phases:

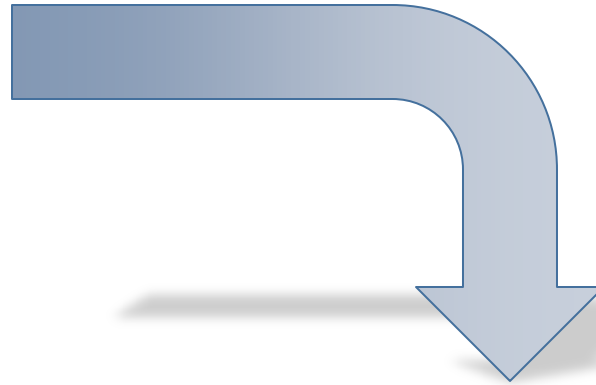
- Conceptual alternatives analysis: options for how to address the **what and why**
- Recommendations: the “best” options for how to satisfy the **what and why**

Purpose and Need Development

Preliminary Purpose and Need

Role:

- Living document
- Basis for alternatives evaluation
- Follows NEPA guidelines
- Saves time in formal NEPA process

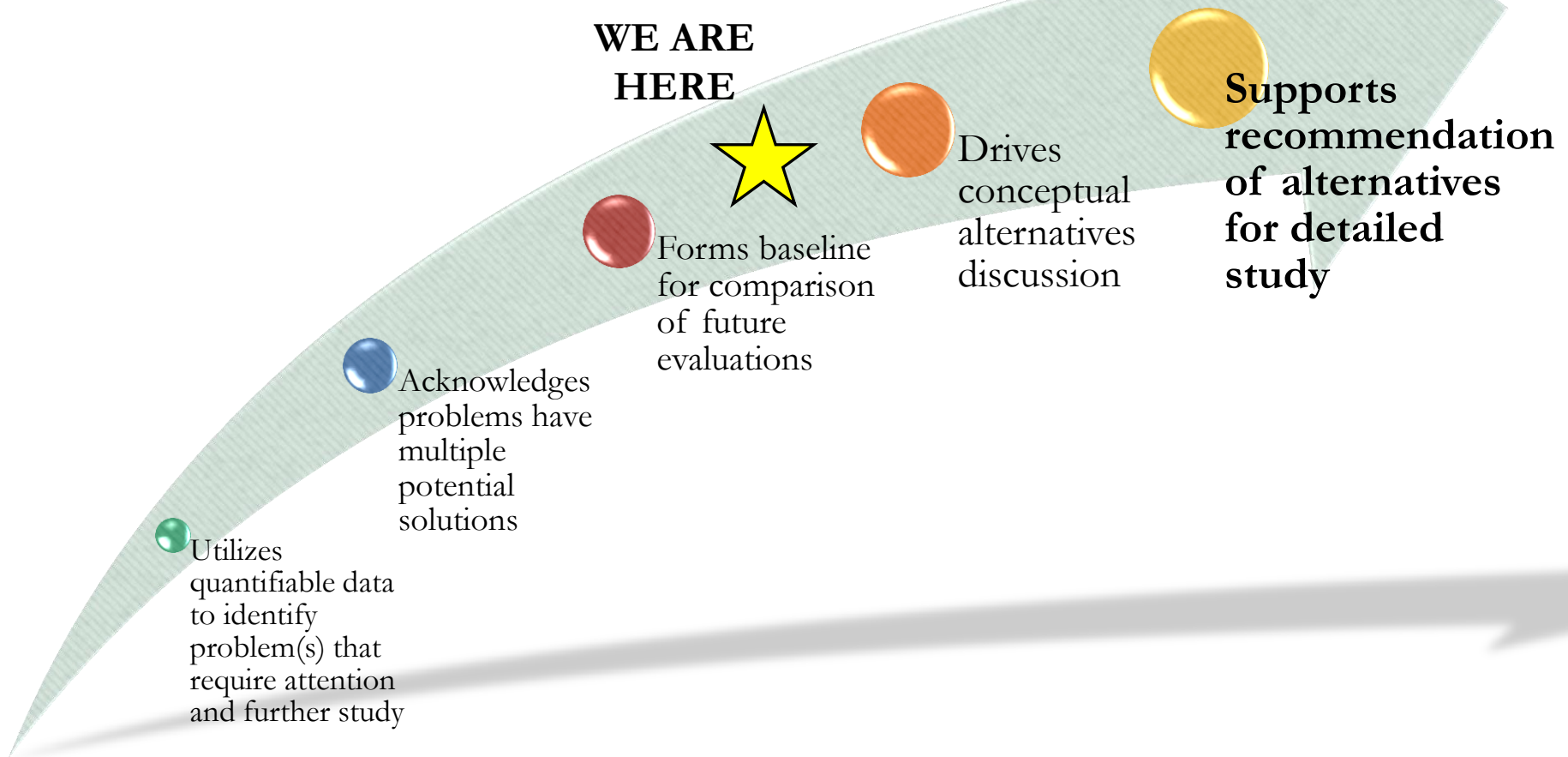


NEPA Purpose and Need

Role:

- Basis for Selected Alternative Evaluation
- Provide consensus between regulatory agencies
- Adopted by federal lead agency

Preliminary Purpose and Need Process



Preliminary Purpose & Need

Document Next Steps

- **CAC Member Review and Comment**
 - Facilitators will email link to Draft Document in mid-December
 - Provide comments by end of January 2016
 - CAC Member comments will be combined with comments from the Spring public meetings

Questions?

- ✓ BRT Project Management Team Update
- ✓ Project Process & Schedule
- ✓ **Goals & Objectives/Preliminary Purpose & Need**
 - ✓ Q&A
- Conceptual Alternatives Development
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Conceptual Alternatives Development Process

- Work completed:
 - Existing conditions evaluation
 - Goals and Objectives
 - Needs identification
- Next Steps:
 - **Obtain CAC Member input**
 - Complete Draft Preliminary Purpose and Need
 - Develop conceptual alternatives
 - Present conceptual alternatives for public comment

What Makes a Conceptual Alternative?

Components:

1. Running way
 - Physical location and interaction with surrounding environment for the BRT
2. Station locations, surroundings, and access
 - Specific location of BRT stops
3. Service and operations
 - BRT operational characteristics (headways, hours of service, bus routing)

BRT Running Way Options

Introduction:

- Six BRT Running Way options have been identified for consideration
- The proposed six options can be mixed and matched along different segments of the corridor
- Location and dimensions of proposed roadway elements will vary throughout the corridor
- The six running way options illustrate the interaction between vehicles and the BRT, as they could generally be applied throughout the corridor
- **NOT EVERY OPTION IS APPROPRIATE FOR EVERY SEGMENT OF THE US 29 CORRIDOR**

Conceptual Alternatives Components: Running Way

Considerations:

- BRT operations (speed, reliability)
- Traffic operations
- Ridership
- Connectivity
- Potential impacts

BRT in Mixed Traffic

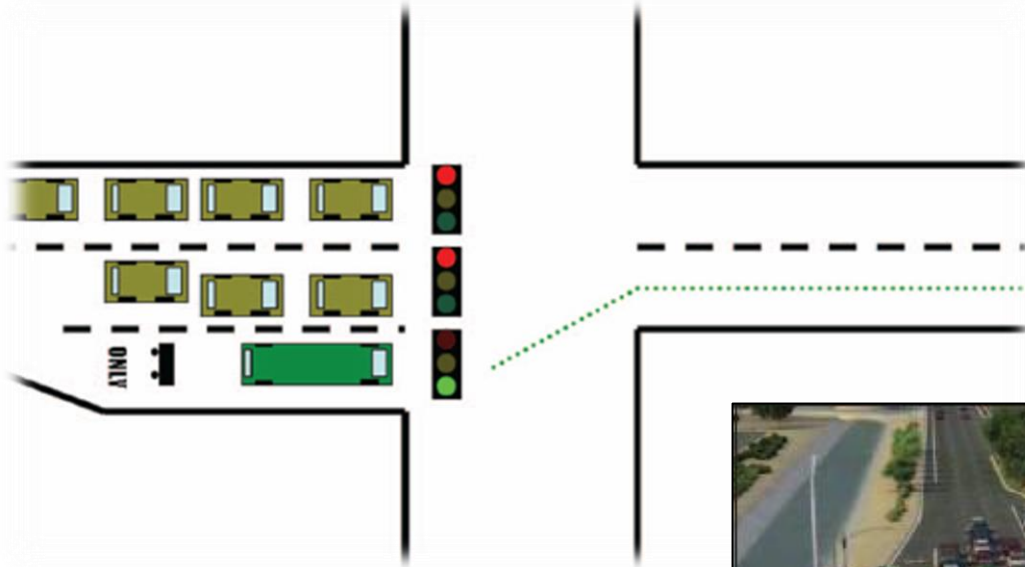


Brampton, Canada

Brampton, Canada



BRT Queue Jump



Queue Jump concept



Reversible/Bi-Directional BRT Lane



Eugene, Oregon

Dedicated Median BRT Lanes



Alexandria, Virginia

Chicago, Illinois (concept)



Dedicated Curb BRT Lanes



Chicago, Illinois (concept)



Snohomish County, Washington

Conceptual Alternatives Components:

Station locations, surroundings, and access

Considerations:

- Adjacent land uses
- Proposed development
- Ease of access (vehicles, bicycles, pedestrians)
- Connectivity to existing transit riders and services
- Proximity to other BRT stations

Station Configurations – Median



Eugene, Oregon

Changzhou, China



Station Configurations – Curb



Brooklyn, New York

Brooklyn, New York

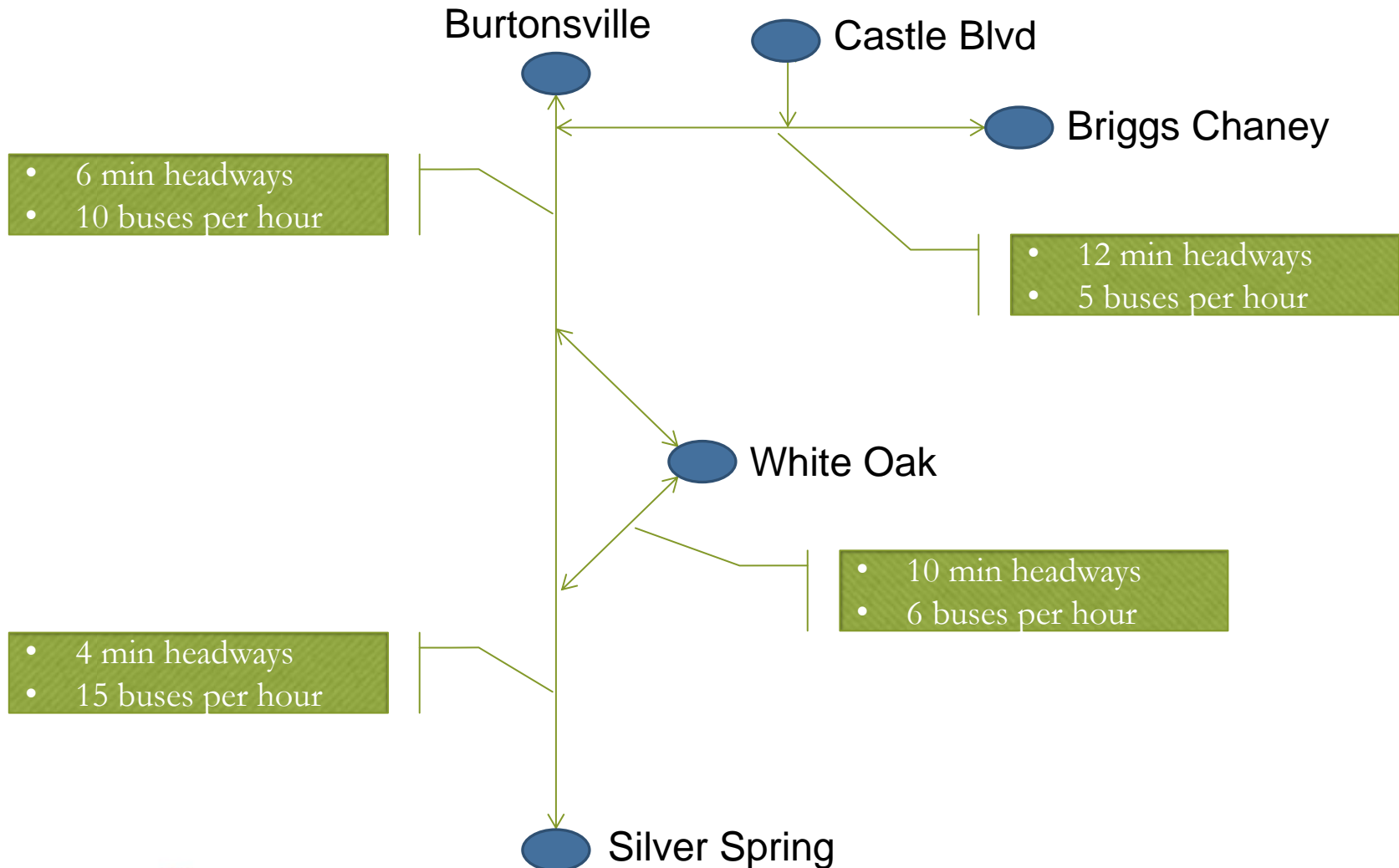


Conceptual Alternatives Components: Service and Operations

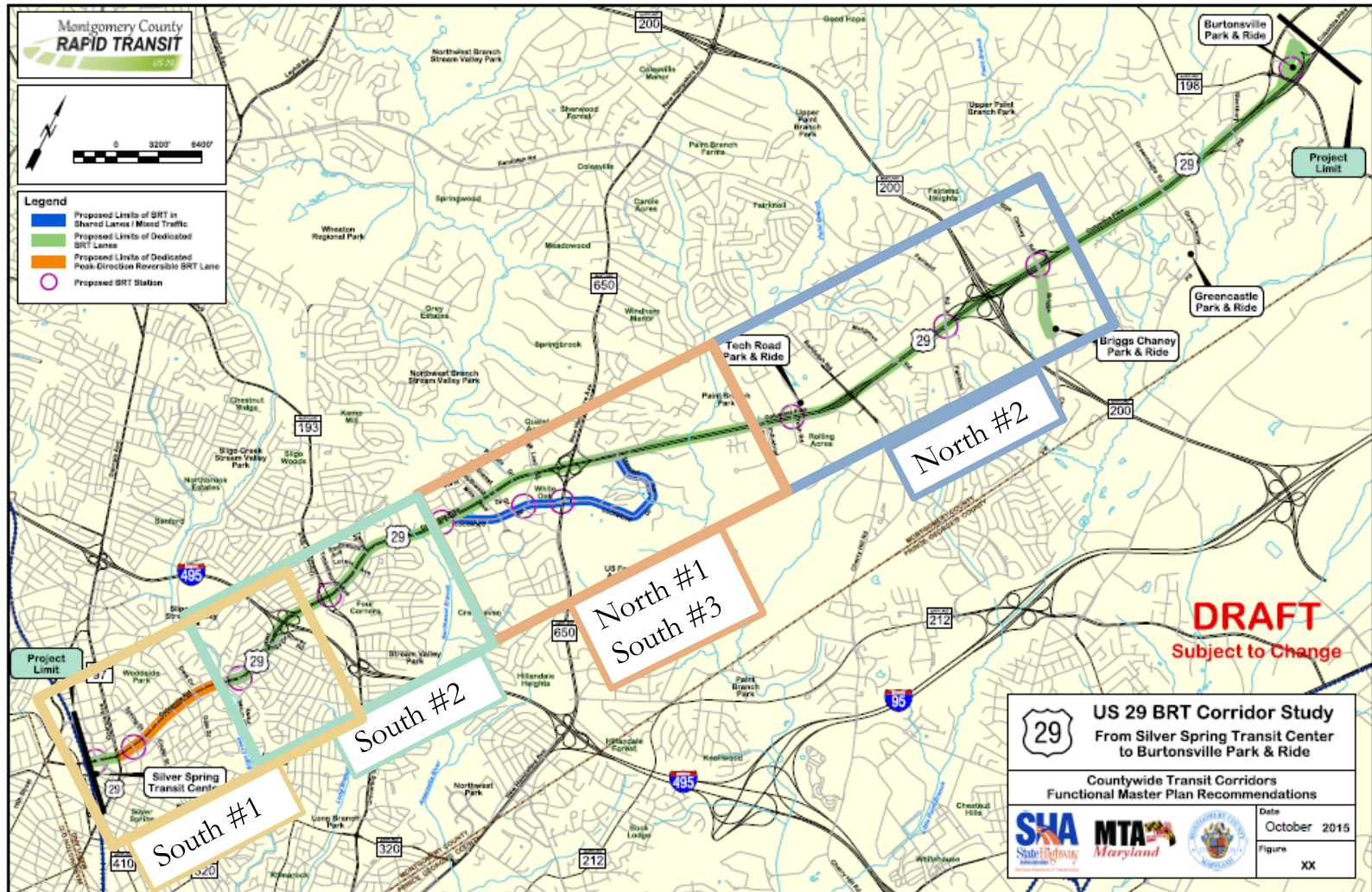
Considerations:

- Bus Routing (Spurs)
- Transfer Points
- Headway (time between buses)
- Frequency (buses per hour)

Example Operational Pattern



Breakout Discussion



Conceptual Alternatives: Breakout Discussion

Three Topics to Discuss:

1. **Running Way** - What running way(s) may be appropriate for this segment of US 29?
2. **Station locations**, surroundings, and access - What station locations may be appropriate for this segment of US 29?
3. **Service and operations** - What activity centers should the BRT system serve?

North #1

- Limits: Lockwood Drive to Industrial Parkway and Lockwood Drive/Stewart Lane Spur
- Posted Speeds: 40 to 50 mph (US 29), 30 mph (Lockwood/Stewart)
- Proposed Stops: Lockwood Drive, Oak Leaf Drive, White Oak Transit Center
- Roadway Sections: Six Lane Divided (US 29), Two Lane Undivided (Lockwood/Stewart), Closed Section Curb, Intermittent Sidewalks
- Major Features: Dense residential and commercial development at MD 650/White Oak, Suburban residential neighborhoods, MD 650 Interchange, Paint Branch Stream, Stonehedge Local Park, FDA Campus
- Existing Transit: Metrobus, RideOn, MTA

North #2

- Limits: Industrial Parkway to just north of Briggs Chaney Road
- Posted Speeds: 50 to 55 mph
- Proposed Stops: Tech Road, Fairland Road, Briggs Chaney Road
- Roadway Sections: Six Lane Divided, Open Section Shoulders
- Major Features: Commercial and Industrial development at Tech Road, Suburban residential neighborhoods, Interchanges (Randolph/Cherry Hill, ICC, Briggs Chaney), Paint Branch High School, Park and Ride lots at Tech Road and Briggs Chaney Road.
- Existing Transit: Metrobus, RideOn, MTA

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Additional Questions & Answers



Adjournment